



TMDL Implementation Guidance for Local Governments: Tracking & Assessment

Presented at the
TMDL Implementation Guidance Review Workshop for
Local Governments

June 14, 2005



Presentation Overview

- **Tracking**
 - **Basic Principles**
 - **State Perspective**
 - **Local Guidance**

- **Assessment**
 - **Basic Principles**
 - **State Perspective**
 - **Local Guidance**



Tracking: Basic Principles

- **TMDLs Create a Quantified Management Framework**
- **Tracking is Key to TMDL Implementation Success**
- **Motivation: Document Credit for on-going Efforts**
- **Account for both Reductions and New Sources**
- **Natural Sources are Included in TMDLs**
- **Land Cover is Important:**
 - **Preserve & Create Natural Land Cover**
 - **Minimize & Reduce Impervious Cover**



Tracking: State Perspective

- **Many Impairments. Two of Particular Attention:**
 - **Nutrients**
 - **Non-tidal Stream Integrity –Biological degradation**
- **Tributary Strategies. A Mature Tracking System:**
 - **Land Use Changes**
 - **Agricultural BMPs**
 - **Urban BMPs**
 - **Point Source Upgrades**
 - **Natural Resource Practices**
 - **Other**
- **Future Steps – NEIEN: Will improve consistency, timeliness and access to data.**



Tracking: Local Guidance

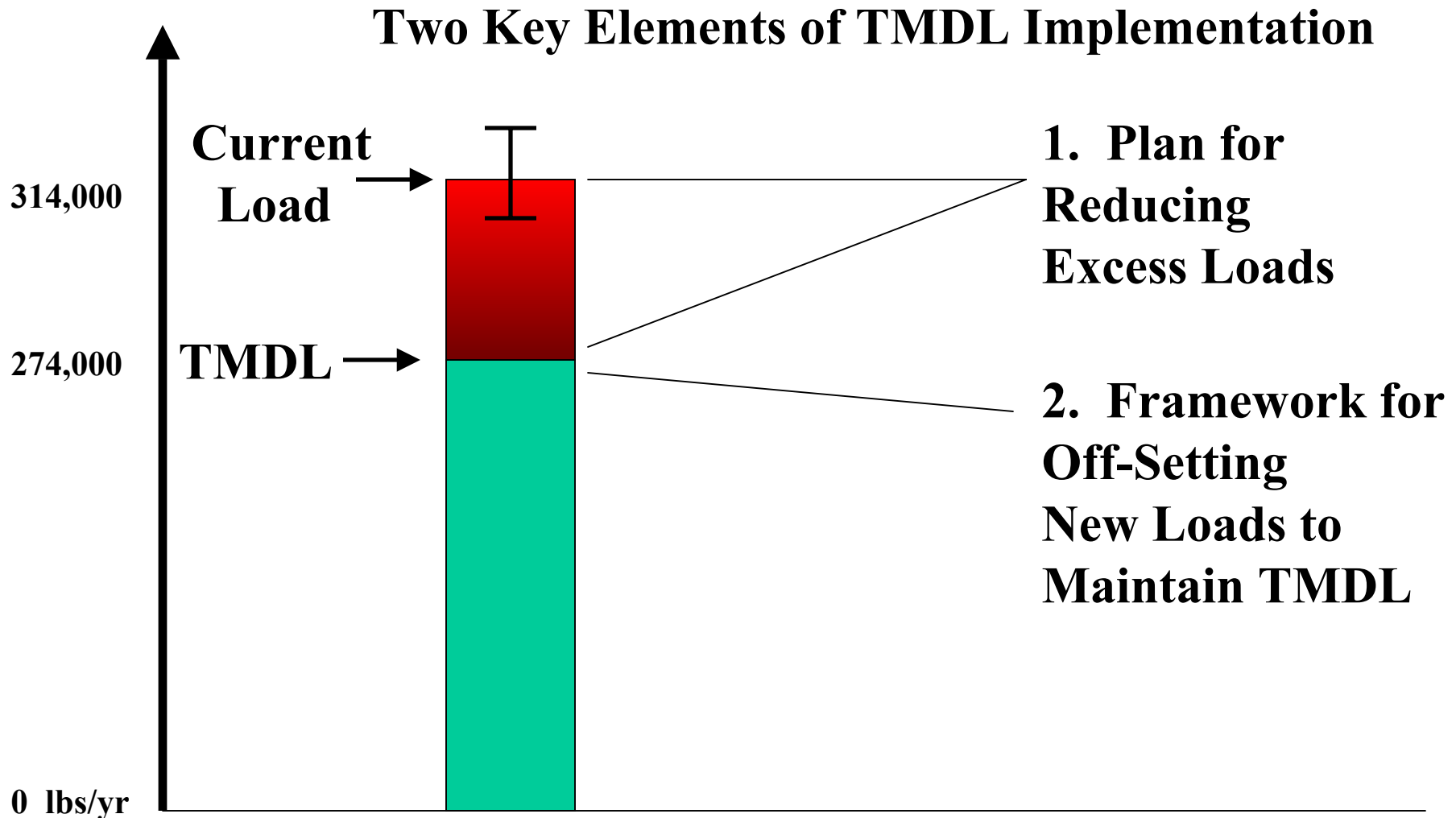
- **General Guidance – Tracking implementation is good for your own environmental management goals**
- **Current Local Tracking is Sufficient for Now**
 - Routine Urban BMP As-built reporting
 - NPDES Watershed Assessment Implementation Projects
 - Redevelopment Retrofits
- **Changes in Land Cover**
- **Stream Corridors**
- **Capacity Building:**
 - Enhanced Use of GIS
 - Management of pollutant offsets



Assessment: Basic Principles

- **TMDLs Create a Quantified Management Framework**
- **Assess Progress Toward Achieving the TMDL (Net):**
 - Assess Reductions due to Implementation Actions
 - Assess Increases due to New Sources/land use changes
- **Ultimate Assessment**
 - Water quality criteria met
 - Designated Uses attained

Elements of TMDL Implementation





Assessment: Basic Principles (Con't)

- **“Current Load” Relative to the TMDL Goal**
- **TMDL Implementation Plans**
- **Net Changes in Loads & Off-Setting New Loads**
- **Land Use Planning: A Context for TMDL Assessments**
- **Water Quality Monitoring: Ultimate Evaluation Assessment**

Assessment: State Perspective

- **The State must Address all Types of Impairments**
 - Nutrients have received most focus
 - Several counties are using stream integrity to guide their own priorities – Alternative TMDLs??
 - Bacteria may be coming up for both urban and agricultural lands.
- **The Chesapeake Bay & Tidal Tributaries (Nutrients)**
 - Assessment focused on implementation and downstream water quality
- **Non-tidal Stream Integrity**
 - Quality Assessment: Biological Indices of Integrity
 - Protection: Maryland Stormwater Design Manual
 - Restoration: Stream Restoration



Assessment: Local Guidance

- **General Guidance**
- **Motivating Scenario & Two-Part Response:**
 1. **Pollutant Reduction Assessment & Plan**
 2. **Assessment of and Plan for Offsetting New Loads**
- **Assessing Pollution Reduction**
 - **State Assistance on Preliminary Assessments**
 - **First Step: Compare Trib Strategy NPS Load to NPS LA**
- **Assessments of New Loads and Offsets**
 - **Explore Options with State Assistance**
 - **Keep it Simple - Bay Program Loading Rates**

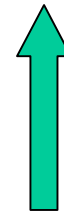


The TMDL Development Result

TMDL = Point Sources + Nonpoint Sources + MOS

Technical Memorandum:

- | | | |
|-----------|---|----------------------------|
| | • Municipal WWTPs | • Natural Sources - forest |
| | • Industrial Plants | • Agriculture |
| | • CAFOs | • Non-NPDES Stormwater |
| Grouped { | • MS4s | • Septic Systems |
| | • Construction SW | • Atmospheric |
| | • Other Industrial SW | • Groundwater |
| | • Anything Requiring
an NPDES Permit | • Other |



“Assurance of Implementation” Statement for NPS Allocations 11